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ABSTRACT

The origin and extent of program reduction and discontinuance at colleges and universities, the elements of program review, and a framework for developing long-range organizational planning are considered. Program discontinuance refers to the merger of related programs, the elimination of certain degrees or programs within departments, and the closing of entire departments. Attention is directed to discontinuance initiated by state higher education agencies, institutions, and individual schools and colleges. Most of the information for the analysis is based on case studies and research on large public institutions and state higher education agencies; a survey of 46 state agencies also revealed that a nucleus of 26 states are initiating or recommending terminations.

Additionally, a literature review considers society at large and the psychology of decline and policy formation, especially policies of termination. The following steps of program review are examined: initiating program discontinuance; the review process itself, including the selection of models and evaluation criteria; the decision-making step; and implementation of the decision and assessment of impacts on students, faculty, academic programs, and institutional budgets and organizational behavior. It is proposed that the institution needs: policies, data, and personnel to design strategies for program discontinuance; review teams and a continuous review process; sunset provisions (i.e., a stipulation calling for periodic program evaluation); and provisions for incentives and awards at various stages in the discontinuance process. A bibliography is appended. (SW)

Report

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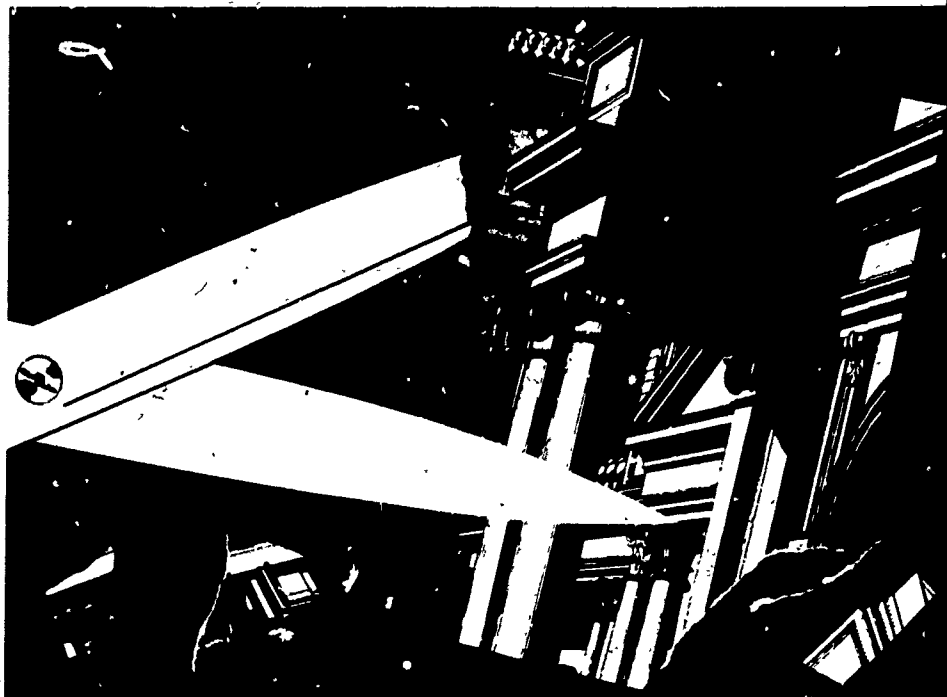
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Planning for Program Discontinuance

*Gerlinda S.
Melchiori*

From Default to Design



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Planning for Program Discontinuance

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Gerlinda S. Melchiori

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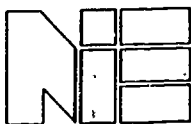
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Foreword

In our growth-oriented society the prospect of not being able to expand or, at the very least, maintain the status quo is very distressing to people. The negative, at times violent, public reaction to the oil embargo of the early 1970s and the U.S. automobile manufacturers' reluctance to develop smaller, more fuel-efficient cars are examples of this phenomenon.


This is no less true for higher education institutions. As the pressures of declining enrollments, state and federal revenues, and endowments, coupled with years of high inflation have increased, the institutions have been forced to address the issue of adjusting their priorities in order to balance their budgets. This condition was earlier addressed by Kenneth P. Mortimer and Michael L. Tierney in *"The Three 'R's" of the Eighties. Reduction, Reallocation, and Retrenchment* (AAHE-ERIC Higher Research Report No. 4, 1979).

The initial reactions of the institutions were to control expenses by simply not spending. This took the form of deferring maintenance and salary increases, making do with available equipment, and avoiding purchasing new items such as books and periodicals for the library. It did not take long to realize that this way of coping was dysfunctional to the educational mission of the institution. While in the short run it may have been successful in balancing the budget, in the long run it meant decreasing morale for the faculty and ability to maintain overall academic quality. The long-term solution lay in adjusting the activities of the institutions in such a way that enough funds were available to meet the needs of those areas most central to the institution. Some areas had to be eliminated in order to provide money to ensure the quality of other areas.

It is this process of constructively identifying the areas that are of high priority to the institutions and the areas that might be reduced or eliminated that is addressed in this Research Report. Gerlinda S. Melchiori, coordinator of academic affairs in the College of Literature, Science, and the Arts at the University of Michigan, has carefully analyzed and synthesized the major literature on program reduction and discontinuance. This analysis, combined with her own research, provides a positive framework for developing long-range organizational planning to meet the realities of future revenue while minimizing the potential disruption caused by program discontinuance. By understanding the experience of other institutions, administrators and faculty will be better equipped to direct the future of their own institution.

Jonathan D. Fife

Director

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I also wish to thank the Exxon Education Foundation and the University of Michigan for funding the research components underlying the analyses and recommendations presented here. Finally, special thanks go to Carol Quiroz, who once again provided the bridge from manuscript to type.

Overview

"Program discontinuance"—the term to many connotes decline, an adversary relationship, and turmoil. This monograph suggests that program discontinuance can be a proactive and realistic tool for retrenchment in that it has a potential use in changing curricula and in reducing budgets. These potentials cannot be realized as long as program discontinuance is initiated by *default*—as a reaction to immediate, intense financial problems—rather than by *design*—as a proactive, long-range planning tool requiring lead time and startup resources.

In the absence of a uniform definition, the term "program discontinuance" is used in a broad sense, including the merger of related programs, the elimination of certain degrees or programs within departments, and the closing of entire departments. The monograph deals with discontinuance initiated by state agencies for higher education, by institutions, and by individual schools and colleges. Most of the information is based upon case studies of and research on large public institutions and state agencies for higher education. Although it is assumed that most of the issues discussed apply in varying degrees to small and/or private institutions, their application must be evaluated within the context of a given situation.

Program discontinuance is a tool for reduction that supports differential rather than across-the-board reductions, and it is a tool for change in that the reduction follows a thorough assessment of the needs for and quality of an institution's curricula. The intent to close academic programs touches the very pulse of an institution, the curricula, and the faculty, causing many obstacles to appear. To muddle through this labyrinth of hindrances, questions, and problems is not enough to deal with the level of retrenchment predicted for the future. Thus, the earlier an institution or a system of higher education plans for systematic program discontinuance, the less traumatic the actual reduction and change will be.

The first step in that direction is to identify existing obstacles, one of which is the difficulty in accepting the notion of continuously decreasing resources (enrollment and/or funds). A stubborn adherence to strategies for reduction from previous times of troubles (such as trimming budgets, postponing renovations, and releasing untenured faculty) indicates that people have difficulty in giving up the hope for a return to growth and better times. Socialized to expect regular increases, people find it slow and painful to reverse that psychology. Another set of obstacles includes the adherence to tradition, the formation of specific personal loyalties, and the socialization of people into job norms; these modes of behavior may lead to inertia and a resistance to change. Long standing policies and entitlements, such as tenure and due process, also constitute particularly strong forces that resist change. Finally, the lack of strategies for implementing the modification, merger, or discontinuance of curricula and the lack of experience in working in untested terrain are also obstacles.

The second step, then, is to eliminate these obstacles or to strive to circumvent them strategically. That effort includes the review of existing policies, which in time may lead to the development of new policies for program discontinuance or other provisos that will undo grandfather clauses.

Sometimes nothing short of a change in specific personnel or an entire administration is required to break up traditional managerial thinking and established modes of behavior. The most important aspect, however, is the creation of a solid, professional process of program review. Although the closure of a program may be triggered by a variety of reasons, it almost always follows a more or less comprehensive process consisting of initiation, program review, decision making, and evaluation.

Initiation. When state agencies initiate a review, quantitative tripwires (typically measures of cost and efficiency) are used to identify possible candidates for termination. Institutions that initiate the process tend to use a mixture of criteria for efficiency and effectiveness to single out candidates for closure. The issues of exactly how to identify potential programs for closure and to what extent the affected faculty can and ought to be consulted continue to be vexing problems.

Program review. Although much has been written about a whole range of criteria, the review ultimately comes down to issues of quality and centrality. Guidelines and general criteria for review and discontinuance should be developed in light of the institution's mission. A designated unit, perhaps the institution's research office, should collect the data for specific reviews.

Decision making. The answer to the question of who on what level decides to terminate a program depends upon the prevailing tradition of governance. The role of the faculty (advisory?) should be clearly delineated vis-à-vis the role of the administration (decision making?). The development of coping mechanisms (e.g., provisions to retrain faculty, seed money for research, incentives for retirement) may function as additional ways to circumvent and prevent potential resistance to discontinuance.

Evaluation. As program discontinuances leave behind a trail of resentment, accusations, and disrupted careers, it is not surprising to find that their impact is rarely studied. After all, in most cases the cast of actors involved in a given process is rarely present to analyze the impact. Nonetheless, more studies should focus on such subjects as elimination resulting from generic and thematic mergers, partial discontinuance, and other strategies.

The third and final step in making discontinuance less traumatic entails the cultivation of an overall constructive climate for reduction: the establishment of guidelines for program discontinuance, the development of sunset provisions, and the creation of structures for incentives and rewards. An overall, time-ordered process for coping with change should be developed before any program discontinuations are initiated. The purpose of thinking through the situation, at hand, the goals to be achieved, and the strategies and tactics to achieve these goals is to induce *planning for reduction* and thus, it is hoped, keep organizational stress and personal pain to a minimum.

Genesis, Definition, and Extent of Program Discontinuance

Alternatives for Retrenchment: Concepts and Strategies

The majority of states and their institutions of higher education are in the midst of reductions on all fronts. budgets, faculty, enrollment, student support, research support, and curricular offerings. Much has been written about possible strategies for reduction, and case studies and surveys of both institutional and state reduction processes have burgeoned. Paradigms and theoretical frameworks analyzing characteristics and impact have been developed. Controlling factors of these frameworks tend to be primarily budgetary or curricular in nature.

Budgetary reductions may consist of some or all of the following basic strategies: adjusting budgetary standards (raising student/faculty ratios, for instance), enforcing proportional budget cuts, decentralizing control of revenues and expenditures, and differentiating budget cuts according to selective priorities (Balderston 1974). A continuum of strategies responding to fiscal stress includes postponing, belt-tightening, cutting and reallocating, searching for new funds, and planning and worrying (Chleit 1971).

Curricular strategies, in addition to considering the reduction and discontinuance of existing programs, need to take into account the continuous need for curricular change. Thus, program development during times of overall reduction necessitates internal reorganizations, merger, modification, and other changes. One strategy involves the creative reorganization and use of resources for the development of umbrella programs that provide skills and knowledge cutting across the boundaries of traditional departments. A second strategy involves aggregating existing courses into new, interdisciplinary frameworks (Mandell and Hellweg 1979).

Before any changes are considered, however, programs must be evaluated for worth and necessity. Subsequent adjustments in organization consist of two basic options—continuance or termination. In his book on decline in firms and organizations, Hirschman (1970) calls those two options "voice" and "exit." Voice is an attempt to first identify the causes responsible for the decline of a product or a program and then to propose (or voice) mechanisms for improving its marketability if an analysis shows that it warrants continuation. Exit, on the other hand, refers to the elimination of a product or program if the review indicates that it is no longer viable, compatible, or essential. Hirschman stresses the importance of considering not only these two poles but also the options in between. Testing the elasticity between retention and elimination means considering options and developing innovative alternatives. Hirschman's model of adjusting to decline in effect proposes to seek the optimal balance between voice and exit.

What then are the curricular options in response to decline? Leaning on the Hirschman model for analysis, Melchiori in her 1980 survey of state agencies for higher education focused on patterns of program reduction. A comprehensive database from 46 participating states provided information regarding the range of options available for reductions in programs, the frequency of their use, and their specific attributes.

Based on the responses, two categories in addition to the established endpoints of continuation and termination (Hirschman's voice and exit) seem to occupy the gray area between the two extremes. Labeled "modification" and "merger," they represent various degrees of curricular change. Arranged in a continuum, the four categories and variations within are presented in the table on page 5.

With regard to *continuation*, a program may be continued "as is" or placed on implicit or explicit probation. Two variations are pertinent: contingent continuation, which supports continuation pending the fulfillment of specifically stated conditions, e.g., securing funds or attaining accreditation; and conditional continuation, which implies that a program is placed on probation for a stated period of time. Conditions may indicate that the program will be phased out unless more students are attracted to it or the quality of the faculty is upgraded.

The second category, *modification*, contains a variety of options that are designed to explore the elasticity of a program's potential for change if the initial agreement is that the program is worth retaining, albeit with fewer resources. Several options for change are noted in the table.

Moving even closer to exit, *merger* also tests the flexibility of a particular program. A decision for merger signals that retention is feasible only if major adjustments are made, such as pooling resources or realigning programs. The determinants for selecting a specific variation of the merger are directly related to the weaknesses of the program—for example, a declining student pool, high costs of equipment, computers, or library; changes in the discipline and marketplace.

The fourth category, *termination*, leaves behind the area of exploring options and enters a less fluid arena. Although any of the previous three categories may eventually include program discontinuance, this category states such intentions much more bluntly. Typically, termination entails the elimination of specific degrees within a department or the discontinuance of programs whose faculty and students already have dwindled away. The elimination of academic departments and entire colleges is minimal.

Program Discontinuance: Its Parameters and Definitions

What constitutes program discontinuance? The term is as difficult to define as "program" itself. A program can be described as a constellation of elements serving a common set of objectives (Topping and Miyataki 1973). These objectives can be expressed in terms of intellectual, analytical, or practical skills or in terms of degrees. A degree program can be defined as an area of specialization (major) for which recognition is intended to be given by conferring a degree (Barak 1975, p. 38).

Programs differ in duration, size, input, and outcomes (Weiss 1972). Most importantly, programs differ in scope. The scope of a program for higher education could be described as a program within a department, a department within a particular school or college, a school or college within an institution, or an institutional program (mission) within the

Variations and Alternative for Reductions in Academic Programs

Voice	Voice-Exit Continuum		Exit
<i>Continuation</i>	<i>Modification</i>	<i>Merger</i>	<i>Termination</i>
Unconditional continuation	Changes in structure of program	Departmental merger	Elimination of paper program
Contingent continuation	Changes in curricular design	Merger by dispersal	Elimination of specific degree
Conditional continuation	Changes in mode of delivery	Generic merger	Elimination of degree-granting authority
	Reductions in budget/staff	Thematic merger	Elimination of program
	Elimination of subfields	Supra-collegiate merger	Elimination of department
	General phase-down	Supra-institutional merger (consortia, rotation)	Elimination of unit/department/college

state. According to this hierarchy of scope, the elimination of a program could be called program discontinuance (closure, termination). However, from the perspective of the next higher level, the department, the discontinuance of that program is a reduction of its (departmental) program, and so on.

To overcome this confusion and lack of clear delineation, administrators have used some or all of the following results as indicators of program discontinuance:

- removal of references in the university or college catalog defining the program as a separate study area
- elimination of a separately budgeted unit
- elimination of a unit that enjoys separate status through common use in a given department, e.g., community psychology (sometimes referred to as "partial discontinuance")
- removal of tenured faculty from an identifiable unit
- elimination of specific degree levels from a program.

Within the context of this paper, the term "discontinuance" is based on all these uses.

The definition of program discontinuance also depends on politics. Based on the research on program reduction and actual experience with various discontinued programs, the definition must include all of the above indicators if it seems desirable to administrators to avoid the label "program discontinuance." If, on the other hand, the goal is to make an example of a discontinuance case (perhaps to get public attention or to apply available guidelines), the definition includes only one criterion; e.g., the elimination of a Ph.D. program in a given field suffices to speak of a program discontinuance. In any case, no uniform definition of program discontinuance exists, and the selection of that term may be based upon political or strategic considerations rather than preestablished absolute values.

Historical Genesis of Program Discontinuance

During the early 1970s, the phrase "program discontinuance" gained popularity as some states began to consider closing programs to reverse previous curricular proliferation and to respond to declining enrollment and budgets. The term soon took on negative connotations as some faculty were relieved of their teaching duties. The reaction that these events were happening for the first time is understandable if one remembers that higher education had grown tremendously in recent memory. But clearly meager times had occurred before, and perhaps studying the historical perspective would provide clues about what strategies had been employed and what kinds of benefits could be derived to better adjust and plan for current reductions.

Books on the history of American higher education or particular universities tend to reflect their authors' zeitgeist. Because a basic charac-

teristic of our national thinking is to expect growth, events tend to be recorded in terms of expansion, addition, and developments (e.g., Peckham 1967). Nonetheless, a careful reading of history books about higher education reveals information regarding remedies to increase enrollment, reallocate scarce funds, and reduce faculty and staff (Brubacher 1977, Brubacher and Rudy 1968, Holstadter and Smith 1961, Shannon 1960). Of particular value is Malcolm M. Willey's 1937 classic, *Depression, Recovery and Higher Education*. The following paragraphs summarize some of the causes for retrenchment, the management of problems, and some of the outcomes.

Causes for fiscal stress. Throughout the colonial period, many institutions of higher education were plagued by fiscal stress. The causes were usually the lack of enough enrollment and/or a steady tax base. Averaging only eight graduates a year during its first 75 years, Harvard suffered from a chronic lack of funds (Hammond 1976, p. 12).

Following the revolution and the transplanting of ideas based on the European Enlightenment, higher education for decades enjoyed high status and relative security. During the 19th century, however, several trends contributed to economic difficulties, forcing many programs to be eliminated and many colleges to be closed. One reason was the growth of religious diversity and the resulting competition for both students and support. Administrators soon realized that denominational coexistence was necessary for survival. Soon religious requirements were relaxed for other denominations, in fact, minority representation (of other denominations) on governing boards was sometimes granted (Brubacher and Rudy 1968, p. 9).

A second cause for fiscal stress was the trend toward eliminating religious control of colleges. Beginning even before the Civil War, influential and wealthy "men of affairs" began to take the governing reins out of the hands of the ministry. These people were interested mainly in preparing students for leadership in burgeoning industries. Filled with classical scholars, universities resisted the abandonment of their traditional classical curricula in favor of pragmatic subjects. Instead, faculty argued that the merchants and farmers should also be trained in the classical curriculum (Holstadter and Smith 1961). As late as 1875, President Angell of the University of Michigan opposed the opening of a dental school because dentistry was not an intellectual discipline (Peckham 1967, p. 72).

Perhaps the most serious threat to higher education occurred during the Depression. According to Willey (1937), financial exigency existed for higher education in 1932-34. Preceded by a decade of growth (enrollment doubled), institutions were forced into drastic actions: cutting back salaries at first, then reducing faculty, then closing programs and entire departments—Hutchins in Chicago eliminated 34 programs (Hammond 1976, p. 12)—and finally, temporarily closing entire schools. An actual enrollment decline of 8 percent occurred in higher education from 1932 through 1934. Thereafter, the upward trend resumed, and by 1935-36

enrollment surpassed the pre-Depression peak (Willey 1937, p. 234) There was little time and need then to plan for long-range systematic reduction

Despite the economic severity of the depression, purchasing power of faculty salaries did not decline. It is a pity that Willey's book is limited to the quantitative analysis of those faculty who remained in their positions. Thus, no accounts of those who were forced to leave exist. The actual number seems to have been quite low, less than 3 percent of the teaching staff, primarily instructors (Willey 1937, Table 7, p. 28).

The most recent period of retrenchment occurred during World War II as many potential students entered the service and more and more resources were pumped into the defense industry. Problems of enrollment and economics tended to be quickly eliminated. However, as the government increasingly demanded and supported military courses and war research on campuses. In addition, many faculty members were granted leaves for government service. Thus, although the enrollment declined, excess faculty was not a problem.

In sum, fiscal stress consisted of the twin problems of lack of enrollment and adequate funding, these symptoms in turn were caused by institutions' competing for available students, by national priorities competing for attention and funds, and/or by temporary hardships in the economic fiber. None of the historical sources implied that these times of troubles were anything but transient and temporary. The United States was still ascending to world power, and there were no limits—economic, geographic, or psychological—in sight.

Strategies for retrenchment and their outcomes. Similarities can be noted in the way institutions historically responded to pressures. Although institutions' roles and missions were examined, expenditures scrutinized, and programs audited, there tended to be no substantial changes in administrative practices toward long-range planning and the development of policies about reduction. Measures seemed to have been reactive and ad hoc and were assumed to be temporary and transitional. The following strategies can be inferred from historical sources:

- applying across-the-board and program-specific cutbacks
- encouraging interinstitutional cooperation
- evaluating programs and introducing sporadic reductions and phase-outs
- creating 'new interest' courses and "emergency" courses to draw additional enrollment
- lowering entrance requirements
- implementing institutional hiring freezes
- releasing faculty, particularly nontenured people
- encouraging early retirement and using nonpromotion tactics
- reassigning and/or transferring faculty
- limiting employment periods (Willey 1937; Hofstadter and Smith 1961; Brubacher and Rudy 1968; Brubacher 1977).

To highlight the implications of these strategies, it seems appropriate to summarize the more-long-range outcomes that resulted from the earlier periods of retrenchment:

1. A spirit of opportunism seems to have emerged rather quickly. courses in agricultural economics during Reconstruction, New Deal emergency education programs, World War II on-campus military training courses, ROTC.
2. The lowering of entrance requirements tended to result in a real or perceived decline in quality, which in turn induced a return to traditional courses, stiffer student quality control, and more structured curricula.
3. An exodus of good faculty from the universities tended to result in a decline in academic research to the benefit of industry or government.
4. Both state and federal intervention increased with additional appropriations, research grants, student financial aid programs, or legal requirements. Government's role continued beyond the exigency period because federal programs, once instituted, were rarely terminated.
5. Pleas for the development of role and mission often remained unanswered by the institutions. Typically, they initiated neither summative nor long-range formative plans. Subsequent growth periods (the 1880's, after 1935, after 1947) once again evolved in a fairly laissez-faire mode (Brubacher and Ruby 1968; Hofstadter and Smith 1961. Peckham 1967; Shannon 1960; Willey 1937).

Retrenchment today. While declines in enrollment and resources are familiar to higher education today, additional components make the current climate different. The age of American growth and expansion has ended. Natural resources have become scarce, and competition for them has increased. The United States is no longer the awesome giant but increasingly interdependent upon other nations. And there is little hope that this situation will change in the near future. Nor can change be expected in higher education. Most state budgets are deeply impoverished, and the pool of future traditional students is predicted to decrease over many years. Indeed, long-range decreases are predicted for all but a few states.

In light of the fundamental difference between previous periods of retrenchment and the current situation, it is all the more disturbing to note that, despite years of warning, strategies for reduction continue to be reactive, ad hoc, and mostly unplanned. Cheit's survey (1971) indicates that initial responses to fiscal stress are postponing, belt-tightening, and cutting. Planning does not enter the picture until the fifth and final phase. Similarly, a study of policies regarding the reduction of staff at 163 institutions (two-year, four-year, and senior public and private institutions) shows the following measures, listed in order of their reported frequency.

1. not filling vacancies
2. terminating nontenured faculty

3. terminating part-time faculty
4. terminating teaching assistance
5. encouraging early retirement, especially for faculty with high seniority
6. reassigning faculty and staff to new areas
7. intensifying evaluation of performance (Sprenger and Schultz 1974, p. 221).

Current Level of Program Discontinuance

During the past few years, researchers have attempted to collect nationwide data on retrenchment (Hample and Kaelke 1980). Such research has been successful to the extent that surveys were able to determine the extent to which policies and regulations provide for implementing program discontinuance, releasing faculty, etc. On neither on the state level nor the institutional level has it been possible to collect hard data. The difficulties are many: the sheer size of such an undertaking; problems of defining what constitutes program discontinuance; timing (date of initial decision versus date of implementation); as well as a host of other sensitive issues. The Carnegie Commission in 1979-80 polled 2,508 institutions regarding the existence of policies and practices for handling retrenchment; 40 percent (995 institutions) responded. The information collected consists of data on frequency of conditions requiring retrenchment among the individual types of institutions, extent of unionization, reasons for reductions, and the extent of faculty rights for appeal, retention, and reappointment. Data on the extent of reduction activities and outcomes were not collected.

At the state level, a survey of 46 state agencies for higher education reveals that a nucleus of 26 states is involved in recommending, initiating, and deciding on program discontinuance. An additional six states are initiating or recommending terminations. Although not involved in program review at the state level, these six states do have access to some information about programs. In terms of types of boards, 84 percent of the participating governing boards and 73 percent of the 22 coordinating agencies are involved to some degree in terminating programs (Melchiori 1980, p. 72).

A number of variables in the remaining 14 states have caused the agencies to not be involved in any program discontinuance. Some agencies have no authority to do so, while others would have the power but feel that program discontinuance is an institutional responsibility and should be administered on that level only. One state identified itself as a growth state for higher education, while four states have been trying for years to initiate at least review procedures but have lost in power struggles against powerful institutional lobbying groups or influential legislators.

On the state level too, the politics of the issue makes it difficult to collect hard data on program discontinuance. Some of the respondents' explanations were clothed in the general verbiage of technical difficulties; others clearly mentioned that political forces were at play. Respondents made the following observations:

- State agencies rarely collect follow-up information on their own suggestions for program discontinuance to the institutions. If necessary, an agency might be able to learn an approximate number of programs discontinued by counting the program offerings per institution and comparing those figures to previous years'.
- Some states have adopted the policy of not revealing the number of terminations to deemphasize program discontinuance as a specific goal and to avoid creating a destructive climate.
- Problems of definition abound; in many cases, neither institutions nor agencies are interested in fine-tuning the program discontinuance continuum into partial and complete terminations so that they can account for their activities more specifically.
- Program discontinuance is a public relations issue in that many institutions and agencies try to appease legislators and appropriation committees with figures indicating that all involved are doing their best to reduce programs. Implications are that these figures are kept flexible, depending upon their purpose and the audience.
- Finally, the sentiment seems to exist that a public proclamation of high numbers of program discontinuances would reflect poorly upon state agencies' work. After all, had a good state master plan been developed, had program proliferation not been allowed to happen, had agencies been able to consult and influence their constituencies appropriately, fewer programs would now be superfluous.

Even though no comprehensive data are available, an increasing body of case studies reveals descriptive information on problems, benefits, and dilemmas associated with program discontinuance on both the institutional and the state levels. These case studies are the basis for closer scrutiny in subsequent sections.

Literature on Decline, Change, and Discontinuance

In view of the author's belief that many of the problems associated with terminating programs indicate a much larger phenomenon, namely the inability of society to cope with decline in general, the literature reviewed for this monograph goes well beyond higher education—beginning with society at large and the psychology of decline, moving to an analysis of the formation of policy, especially policies of termination, and finally discussing specific instances of program discontinuance at both the state level and at the institutional level.

Societal Change and the Psychology of Decline

The discontinuance of academic programs is occurring within an era of adjustment to a no-growth future for society in general.

Our society is psychologically unprepared to face nongrowth, decline, or defeat (Michael 1968). After decades of expansion and superlatives, of gains in power and influence, Americans have been socialized to expect regular increases and increases in increases (Callan and Jonsen 1976). We now need to learn to live with gloomier prospects before any constructive plans for dealing with decline will be emotionally accepted and implemented. This ideology—upon which national programs are justified—is only recently beginning to catch up with that reality.

Some scholars have already gone so far as to predict the possibility of an institutional collapse (perhaps even an actual collapse) of our present system of higher education. "Structures as great in nature and more powerful in expression than the university have come and gone in history" (Nisbet 1971, p. 204). Higher education could share the fate of the medieval church, the guild, rural living, and the landed aristocracy (Nisbet 1971). Such display of negativism reminds one of the comment that the discourse within the modern university is all too often its members playing the role of doomsayer, predicting that the worst is yet to come (Wheeler 1978, p. 50). An expert on societal change and societal learning, Michael predicts that this society will have to be ready to embrace uncertainty, role stress, and constant change more than ever before (1968). On the other hand, this decline in resources might be advantageous: "Once the psychological trauma of an end of growth has been surmounted, the new era of limited resources could readily be met with a new sense of pioneering" (Hechinger 1980, p. 39).

It is no surprise then that organizations at least temporarily, whether consciously or unconsciously, resist change. Obstacles to change have been categorized in three ways:

- the collective benefits of organizational stability and the power of calculated opposition to change and innovations
- "mental blinders," such as programmed behavior, the socialization of people into job norms, identification with a specific support group, and bureaucratic proliferation, which tend to contribute to the creation of "tunnel vision" and make it difficult to proselytize for change
- systematic obstacles, such as specific policies, limited resources, en-

environmental conditions, a limited market, supraorganizational loyalties, and cross-cutting jurisdictions, which only reinforce the aforementioned behavioral characteristics (Kaufman 1971, p. 21).

Kaufman recommends several ways to accomplish change: selecting a new administration so as to prevent the formation of organizational conservatism, encouraging an influx of new ideas and people so as to counter the development of psychological barriers to change, avoiding the development of antithetical coalitions, and reviewing and thereby eliminating other existing systemic obstacles (1971).

The Policy Cycle and the Termination of Policies

While many of these systemic obstacles are not under the direct stewardship of an organization, barriers in the form of existing policies can still be changed and made to support rather than hinder the process of change. An organizational policy can be defined as:

...an abstraction or generalization about organizational behavior that has structural implications for the organization. Such generalization can be made retrospectively, as recognitions of existing practice, or prospectively, that is policy making, the making of general statements of what organizational behavior shall be. The making of policy in this sense is at once a category of decision making, an aspect of organizational change, and perhaps the most significant expression of leadership. . . . The dimensions of policy making are the formulation of organizational goals and objectives, and the formulation of strategies and procedures for achieving and assessing progress toward such goals (Katz and Kahn 1978, p. 477).

According to this definition, an organization's decision to review its products or academic programs by certain criteria and subsequently eliminate those falling below a defined standard constitutes the formulation of a new policy. Such a policy would allow institutions to revise their organizational policies, most of which are the products of an era of growth and expansion, and subsequently develop new policies and strategies in line with the current climate of reduction.

Political scientists and organizational behaviorists have been increasingly active in research on the formation and administration of policy so as to understand the dynamics of specific policies and their relationship to organizational behavior (Nagel 1978). This research has typically emphasized the initiation and implementation of policy, and considerably fewer efforts have been expended on analyzing the final step in the policy

*Systemic obstacles to program discontinuance in higher education have been a particular problem as institutions have to consider AAUP (American Association of University Professors) regulations, union requirements, and their own financial conditions.

cycle, namely the termination of a policy. In his research on the termination of policies, DeLeon (1978) finds that although some types of termination, such as divorce, death, and revolution, have received great attention, the termination of policies has been ignored in the overall analysis of the policy cycle.

Drawing on other scientists' work, DeLeon proposes an analysis of policy along the following six steps: initiation/intervention, estimation, selection, implementation, evaluation, termination. The first step includes the recognition of a problem (e.g., budgetary shortfalls), the definition of the new objective, and the generation of possible options and strategies for implementation. The estimation stage weighs the costs and benefits of each alternative against the overall objective. During selection, the decision maker chooses among the options. The policy is then translated into specific programs (actions) and carried out during the implementation stage. In the evaluation stage, the effects of the programs relative to the stated objective are assessed, and unanticipated consequences that may have occurred are evaluated. Finally, the termination stage recognizes that a specific policy need not (or should not) live forever; once a policy's objective is reached and maintained, its relevance and applicability should be reconsidered and, if found redundant, outmoded, or dysfunctional, it should be terminated (1978, pp. 280-81).

Why has it been so difficult to plan and execute the termination of a policy? DeLeon identifies various reasons: intellectual reluctance, institutional permanence, dynamic conservatism, antitermination coalitions, legal obstacles, and high start-up costs for change (1978, p. 286). Bardach, another member of the small circle of policy analysts currently studying the nature of obstacles to terminating policy, lists other obstacles: The fear of the uncertain is a primary obstacle. Second, many policy makers consider termination an admission of having made mistakes and thus prefer letting the issue die in less conspicuous ways. Third, very few people or organizations develop incentives to make such adjustments easier or more attractive. Fourth, this society tends to think that certain policies or programs imply entitlement to something and that the myriad of "due process" actions in higher education attest to this notion (1976, pp. 128-29).

Bardach subsequently focused on the formation of coalitions opposing and favoring termination and their potential influence on the success of termination. To prevent the polarization of antitheses, certain conditions may facilitate the termination of a policy:

1. changing the administration currently in power
2. delegitimizing the ideology on which the policy is based
3. cushioning the blow—supporting those expected to suffer from the impact

"Regarding higher education, this condition could, for instance, refer to delegitimizing the developments of new programs or growth intentions per se

4. taking advantage of a period of turbulence during which many peoples' optimistic expectations are already lowered
5. building exit routes into the policy at the time it is formulated.

Two others can be added to this list:

6. developing "sunset legislation," which means that if the conditions that led to the formulation of a program or a policy no longer exist or the criteria themselves need to be reassessed, termination becomes a possibility, and
7. emphasizing the constructive aspects that would result from officially terminating a program or a policy, such as being able to free monies, reorganize departments, or shift people (DeLeon 1978).

If these suggestions for developing constructive conditions for termination seem to lack pragmatism, more practical, albeit political, "coping mechanisms" may be in order.

- Don't float trial balloons. Floating trial balloons sometimes may be a good tactic for testing political winds, but it may also polarize opposition into powerful camps.
- Enlarge the constituency of those who would benefit from the attempted change, for instance, liberals, environmentalists, ecologists, and economists have been used for proselytizing new ideas.
- Take advantage of ideological shifts to demonstrate harm if no change occurs—in higher education, for example, taking advantage of a reawakening of emphasis on basic language skills. Harm indeed could occur if certain faddish programs were not terminated in favor of reallocating resources to the humanities.
- Analyze the possibility of compromise (that is, alteration rather than termination). If results are not satisfactory, prepare for a "clean knockout" at the very beginning.
- On the state level, seek termination through the executive branch rather than the legislative branch of the government. Legislators who are responsible for the establishment of a policy in the first place may want to fight for a compromise to save face. And legislators typically do not like to face up to the negative impacts in their districts.
- Be prepared for short-term increases in cost; terminating a program may not save money immediately because severance pay, retraining, and other costs may be necessary. For short-term economies, termination may not be the route to go.
- Appease those opposed to the termination with new job offers and/or severance pay. Planning and coordinating these efforts must occur during the earliest stage of the attempted change.
- Analyze how much really needs to be eliminated, which means weeding through the economic, social, and ethical arguments put forth by those favoring change and evaluating their legitimacy (Behn 1978).

Policies can be terminated by "big bang" or "slow whimper" tactics. Although Behn considers himself a proponent of the big bang termination, many analysts urge that a big bang not occur before all other alternatives have been considered and weighed against the impact the termination would have on those affected by the decision. The "spill-over" effect—the conflict that may result after the decision is made—is also a factor. A particular action may engender enough conflict to suggest that, on balance, less dramatic action would have been preferable (Janis 1972). Finally, all decisions must be justifiable within the organization's overall commitment to long-range planning and managerial continuity (Katz and Kahn 1978). Thus, consideration of abruptly terminating a particular policy or program ought to be preceded by an analysis of the possibility of incremental change. (See Katz and Kahn 1978, pp. 496–98, for a discussion of incremental change and the fragmentation of decision making.)

Several references have been made so far to the possibility of linking the termination of a policy to simultaneously occurring ideological shifts (For a broad discussion of the psychology of ideology, see Loyle 1977). A public health scientist writes:

Policy change can frequently be traced to underlying changes in social structures. As the system evolves over time, certain characteristics of the changing social structure conflict with ongoing policy, which is in turn characterized by the absence of self-correcting mechanisms. A major shift in policy must be justified on the basis of a powerful system of beliefs that "matches" or has a close affinity with changing aspects of social structure. Ideology provides the intellectual and emotional pressure required to "convince" the system not merely to change itself, but to change itself in a particular way. Moreover, the system of beliefs, or ideology, must be sufficiently acceptable to relevant participants in the system to overcome the inertia of an earlier, competing ideology. Ideology therefore lends legitimacy to proposals for change. To the extent that it is characterized by a high degree of consensus, it may provide the policy arena with enough pressure for change—enough "energy"—to overcome the forces resisting change (Cameron 1978, p. 3046).

This reference to reaching consensus on the change of policy seems to be a widely and openly practiced strategy. For instance, since the advent of the Reagan administration, an overall climate of cutting back has trickled down to various labor unions, which now seem ready to concede some of their earlier gains; to the overall social benefit system, where earlier policies regarding qualifiers and levels of benefit are now threatened; and to the entire system of higher education, where a new ideology of "less is better" has become the driving force at state and institutional levels.

Program Discontinuance at the State Level

Ever since the founding of Harvard in 1636, the colonies, and later the states, have been involved in the development of higher education (Car-

negie Foundation 1975b) While this involvement was relatively passive for the first 200 years, the creation of the public land-grant universities in the 19th century gave the impetus to the establishment of state agencies for higher education to formalize and systematize the growth of postsecondary institutions.

The rapid growth throughout the nation of voluntary, coordinating, and governing state agencies for public institutions is a recent phenomenon. While a generation ago only a few states had any type of agency, today only two states operate without such a state agency. This author's survey of program discontinuance at the state level confirmed the data of the 1975 study by the Education Commission of the States in which 28 states were shown to have coordinating agencies, while 20 states are operating with a governing board (Melchiori 1980). State coordination for the private sector takes place through various types of agencies, typically via the so-called 1202 Commission. Forty-six states now have a 1202 Commission.

Once established, these agencies have not remained static but instead have shown definite trends toward consolidating more and more *de jure* or *de facto* authority (Riley and Baldrige 1977, Glenny et al. 1976). State initiatives regarding change in academe might well operate beyond institutional thrusts, regional values, and local competition as they have to consider the diverse needs of the entire state while keeping in mind available state resources (Barak and Berdahl 1978). Others predict that state initiatives specifically for program discontinuance will gain momentum during the decades to come (Baldrige et al. 1978, Halstead 1974). Several forces encourage this trend toward centralization:

- The public demands accountability in higher education, too many students and dollars are now at stake to allow institutional *laissez-faire* attitudes regarding tax dollars, quality, and priorities.
- Intercampus and intersector rivalry between community colleges and comprehensive universities, the private and public sectors, and small and large campuses indirectly supports a "referee system."
- The federal government pressures agencies to administer and police such activities as financial aid and protective laws for minorities and the handicapped (Carnegie Foundation 1975b).

Some agencies have increased their power incrementally (without formally changing their mandate or legislation) by requesting the enactment of specific policies. These changes manifest themselves in active involvement in coordinating, regulating, and even consolidating activities for higher education, such as planning, distributing funds, and reviewing curricula. One reason for the increase in centralization is that institutions, steeped in the habit of expecting incremental budget growth, have displayed severe reluctance to go beyond across-the-board cutbacks and actually consider eliminating unproductive programs. Basically, reduction occurred by default rather than by design. Placing priorities was done on

an ad hoc basis; planning was reactive rather than proactive. Triggered in part by this institutional inertia, state agencies for higher education increasingly attempted to initiate or enforce the reduction of academic programs by establishing more or less comprehensive procedures for reviewing programs. The purposes for such reviews were to increase financial and political supervision, ensure institutional accountability and efficiency, and protect the consumer from poor quality (Mingle 1978).

Based on examples from individual case studies and site visits, Barak and Berdahl (1978) describe the finer nuances of relationships between agencies and institutions, specifically with respect to procedures for reviewing programs and the formal structures underlying these interfaces. Building upon this project, Melchiori's study (1980) of patterns of program discontinuance was based on interviews with executives from 46 state agencies and several site visits. She sought to study mechanisms employed by the agencies for initiating program reviews and for suggesting program discontinuance as one method of reallocating scarce funds and redirecting or modifying curricula. She found that although state agencies differentiate between *audits* (defined as quantitative flagging processes), *reviews* (defined as program assessments on the basis of predominantly quantitative criteria), and *evaluations* (defined as program assessments emphasizing qualitative criteria), the term "review" in most cases is used in an all-encompassing sense of the word (Melchiori 1980).

Further, she found that institutions provide very little feedback on the kinds of retrenchment mechanisms selected, the program modification undertaken, and the impacts achieved. A chronic problem in relationships between state agencies and institutions is the tendency to communicate, even overstate, negative experiences, and to rarely publicize positive, constructive changes. It is no surprise, then, that the study identified an abundance of stated problems and a dearth of constructive suggestions for reduction.

Based on subsequent analysis, Melchiori (1981) identified eight categories of obstacles to program discontinuance:

1. Legal aspects—

- the lack of formal authority; the absence of guiding policies to enforce changes and/or reductions in curricula
- the existence of unionized faculty and AAUP guidelines, which often a priori preclude the serious consideration of reducing teaching staff
- the existence of "grandfather" clauses, which prohibit new policies from being applied to previous arrangements

2. Interactive issues—

- the dilemmas associated with agencies' trying to superimpose coordination over a constituency that is accustomed to governing itself rather autonomously
- the practice of decentralized university governance, which may present difficulties in encouraging and supervising overall institutional retrenchment

- the need for funds and time to establish the bureaucracy required to organize statewide program reviews

3. Economic issues—

- the absence of fiscal incentives to encourage reductions or changes in programs (e.g., enrollment-driven funding formulas that have no incentives for "efficiency")
- the belief on the part of institutional officers that the closing of some programs may result in a reduction of state funds

4. Political issues—

- the merger of interest groups (alumni, students, faculty, the public), which may result in powerful lobbying against closing a program
- the circumvention by institutions of their state agency by going directly to the legislature and possibly causing the change process to become a political issue
- the support by legislators for their own alma maters (particularly in small states), which may result in institutions' being excused from participation in statewide efforts to reduce programs

5. Definitional shortcomings—

- the lack of agreement between agencies and institutions regarding the content of a proper program inventory or a good state master plan
- the absence of goals and objectives upon which both institutions and agencies agree

6. Attitudinal issues—

- the existence of tightly knit corps of executives who tend to perpetuate long-established institutional values and procedures and who may resent the initiation of any kind of change
- the disagreements over values and expectations among technocrats, politicians, and scholars regarding the quality, need, and efficiency of programs
- the burn out of administrators as a result of unresolved issues in program evaluation and change

7. Procedural issues—

- the dilemmas encountered in determining who is best qualified to review programs—for example, if an agency hires a consultant, it might be accused of handing decisions to outsiders, if it does not, it might be criticized for lack of objectivity
- the absence of a buffer between institutional and state academic officers to protect the staff on the firing line (the availability of a sounding board—a standing committee or an academic council—having been found to be helpful in diffusing criticism)

8. Environmental issues—

- the existence of economic and sociopolitical uncertainty (e.g., growth? steady state? decline?)
- the existence of a particular state ideology (e.g., conservative) that may cause serious resistance to upgrading an agency's authority, supplying requested data, or accepting recommendations
- the impact of a specific incident overshadowing all other efforts—

for example, a highly publicized lawsuit, a change in governors or political parties, or another incident that may result in disequilibria in the personalities and values involved.

Clearly, not all of the obstacles are reduction specific. It would be naive to expect that problems that could not be solved in times of expansion could now be eliminated in a period of retrenchment. Both agencies and institutions have come to realize that perhaps the only realistic way to overcome these hindrances is to work around them by gradually working toward policy changes, reviewing some of the procedural problems, and using innovative coping mechanisms and incentives.

Program Discontinuance at the Institutional Level

The tone with respect to program discontinuance at the institutional level changes considerably. This is the point where the trauma occurs and where statistics become human beings who are concerned about their jobs and professional future. The atmosphere is further influenced by reports in the press that tend to fuel the impression that administrators are ruthless and certainly not in a position to evaluate the quality of academic teaching and scholarship. Other criticisms focus on not providing for enough input from faculty and students and on the general lack of openly sharing long-range curricular plans with the community. Other points of contention center on legal aspects, such as issues of entitlement and tenure. Another accusation is that the political leanings of professors (or of a specific program) are the cause for program discontinuance (Dougherty 1981b). Clearly, it is difficult to be an objective observer on either side.

Literature on program discontinuance falls under many headings: program review (Seeley 1981), reduction, reallocation, and retrenchment (Mortimer and Tierney 1979), financial exigency (Moore 1973a); faculty reduction (Dougherty 1981b), and declining resources (Richardson 1978). While in most of these areas program discontinuance is not the central issue, much can be learned about the general concepts of managing decline.

One general theme in these publications is the need for continuous program review as a way to evaluate activities, establish general standards of quality and quantity, and respond to the general request for accountability. Even though program review may not produce any hard and fast or visible changes, institutions are affected because of "changes in priorities, communication patterns, budgetary processes, and planning activities" (Seeley 1981, p. 59).

Another common thread is the need to *plan* for reduction and reallocation rather than to *react* to acute shortfalls. Planning may include reviewing whether an institution's governance structure is suitable for an era of declining resources (Mortimer and Tierney 1979), creating long-range preventive contingency plans (Moore 1978a), or providing for better institutional research to support the decision process (Richardson 1978).

Yet another theme is the concern for appropriate policies and guidelines. Clearly, the unresolved status of tenure in times of retrenchment is

a central issue here. Over the past years, institutions have developed such varying attitudes and policies toward tenure that it is impossible in this monograph to generalize on their implications for program discontinuance. The answers to the following questions are parameters each institution has to ponder individually. Is tenure regarded mainly as job security or as protection for academic freedom? Is it housed in the department (and could be dissolved if the unit ceases to exist) or in the university at large? Is it within or without a unionized system? Can tenure be withdrawn on the basis of the faculty member's lack of quality? Can tenure be withdrawn on the basis of financial exigency (and whose financial exigency—the department's, the college's, or the institution's)?

Although AAUP guidelines exist for releasing tenured faculty under conditions of financial exigencies, they apply only imperfectly to program discontinuance. According to the AAUP's 1940 *Statement of Principles on Academic Freedom and Tenure*, which in 1975 was translated into policy guidelines entitled *Recommended Institutional Regulations on Academic Freedom and Tenure*, tenured faculty or those expected to get tenure can be dismissed on the grounds of financial exigencies. The regulations define financial exigency as "an imminent financial crisis [criteria for defining crisis are given] which threatens the survival of the institution as a whole and which cannot be alleviated by less drastic means" (Brown 1976, p. 5). This statement on financial exigency, however, does not mesh well with program reduction, because chances are that if only cost factors were considered as a basis for discontinuance, many notoriously non-self-supporting programs would have to be eliminated before an institution could select the programs it feels ought to be closed.* The criteria for program reduction, however, ought to go beyond strict cost factors: A program's value to the institution, to the students, and to the environment at large needs to be taken into consideration (Cope 1982). It is these criteria that lack objective measures and that have been the cause of many legal entanglements.

Rather than approach program discontinuance from the issue of personnel, more and more institutions have begun to assert that in times of hardship universities ought to be able to determine which programs they can afford to alter and that affected faculty will be accommodated with their best and fairest efforts. Procedural guidelines specifically for program discontinuance used to be rare, but recently an increasing number of institutions have developed such provisions for eliminating curricula (Davis and Dougherty 1978).

In response to two problematic attempts at program discontinuance, the University of Michigan developed formal policy and procedural guidelines for program discontinuance that are intended to provide answers to the following questions. (1) Who should decide which program to elim-

*At this writing, the "legality" of financial exigency as a cause for program discontinuance and faculty layoffs is once again under discussion (see *Chronicle of Higher Education*, March 17, 1982).

mate? (2) What criteria should be used in making these decisions? (3) What safeguards should be given to tenured and nontenured faculty and their employees if a program were to be eliminated? (4) What safeguards should be given to students in such a program? In addition to mentioning criteria for review—including quality, centrality, impact on state needs, cost, and the chances of internally relocating tenured faculty—the guidelines provide safeguards for faculty and students and mention several steps for decision and appeal.

Formally approved by the Board of Regents, the guidelines were applied for the first time in 1980-81 as the College of Literature, Science, and the Arts reviewed the Department of Geography for possible discontinuance. Although criticized and perhaps needing clarification, they have become policy and in fact have established the principle for orderly closing a specific unit. (See the third section of this monograph for more detail and a description of some of the remaining dilemmas.)

The analysis of that case confirms some of the inferences drawn by Dougherty in his study of 10 cases of program discontinuance: (1) that it is possible and feasible to eliminate programs to reduce expenditures or reallocate funds and that despite case studies speaking to the pain and trauma involved and despite the pending questions of tenure, the principle has been firmly established in higher education; (2) that decisions about program discontinuance must be within the framework of the institution's or college's mission and that the question must take into account both budget and educational needs; (3) that the process must be guided by strong leadership and protagonists for change; (4) that program discontinuance—although in most cases triggered by a specific incident, such as a financial shortfall—can rarely be done quickly enough to respond to that immediate cause (1981b). Dougherty's emphasis on the need to approach program discontinuance as a long-range planning issue confirms the main theme of this report—to approach program discontinuance by design rather than by default.

Summary

Literature on decline and program discontinuance specifically indicates that our environment is often hostile to change: Society is unprepared and reluctant to accept a nongrowth world; institutions by their very nature are conservative organisms, resisting change because of tradition, inertia, and bureaucratic proliferation; most policies are products of an expansionist ideology, and guidelines for program discontinuance are only gradually being developed, change, including discontinuance, is expensive in that it requires start-up resources and lead time, which are typically not available when program discontinuance is being considered. A host of difficulties and obstacles to implementation beset program discontinuance at the state level and at the institutional level. Inferences from multiple case studies indicate that program discontinuance is a process with many components. Although interrelated, they can be analyzed, developed and improved independently.

Procedural Aspects of Program Discontinuance

Although the closure of a program may be triggered by a variety of reasons, it almost always follows a program review. The process of program review is frequently discussed in four separate steps. (1) initiation, (2) review, (3) decision making, and (4) implementation and assessment of impact. Of these steps, initiation and review have been analyzed and documented in great detail, while relatively few analyses focus on the remaining steps, particularly assessment of impact. One reason for this lack may be that reviews seem to have their greatest impact on the general knowledge base of administrators and thus their impact is indirect and intangible (Seely 1981). They provide few specific answers.

Initiation of Program Discontinuance

The initiation of program discontinuance depends upon the system of higher education in a given state and thus may occur either through a state agency or directly on the institutional level.

State level. Many state agencies for higher education, including the nation's large multicampus systems, have developed various mechanisms potentially leading to the elimination of programs. One such method is a comprehensive, usually cyclical, process of program review. These reviews lead to closures only if accompanied by simultaneous announcements of reduced budgets (Melchiori 1980). Once these signals (formal or informal) are sent out, it is up to the institutions to designate their low priority programs.

Another method of selection used by state agencies is the establishment of tripwires by which weak programs can be identified. Tripwires range from a single criterion (costs in South Carolina) to several (costs, output, institutional priority, and program quality in West Virginia) (Berdahl 1975, p. 13). Flagging occurs formally (e.g., asking institutions to substantiate their reasons for offering low-demand programs) and informally (e.g., encouraging university officials to follow up on indications of low demand). Accreditation agencies, professional associations, faculty, administrators, and the public have also initiated the process. (For more information on state-level flagging and program review, see Melchiori 1980, pp. 65-68 and 188-90.)

Causes for initiating reviews tend to be multifaceted, the following seem to be the most important triggers:

- duplication or overlap within the region or state
- questionable quality based on requirements, outcomes, amount of research, publication
- a flooded job market
- costs (low enrollment, low faculty/student ratio, high support costs)
- questionable appropriateness of subject measured against perceived needs, public opinion, etc. (Davis and Dougherty 1978; Barak 1975).

Most state agencies like to circumvent the labels of quantity and quality

as causes for program review (Dougherty 1979), fearing that evaluating quantitative criteria like cost would deny the very mission of higher education and that evaluating quality may mobilize faculty into defending their beleaguered colleagues. Selecting indicators of quality is particularly sensitive, because most faculty would claim that the quality of a program directly depends upon the resources (i.e., dollar appropriations) the university bestows upon it. The state of Washington is an exception in that the state board readily admits to using nothing but quantitative criteria, the rationale being that quantitative criteria will also reflect quality programs (Dougherty 1979).

Institutional level. Initiation at the institutional level in most cases rests with individual colleges and then deans. Although often triggered by reductions in base budgets, the opening of proceedings to discontinue a program or department is based on both qualitative and quantitative criteria. Review occurs on the basis of three broad factors: (1) the academic quality of the program under consideration; (2) the changing environment in which higher education must operate; and (3) the changing priorities of the institution or the state (Dougherty 1981b, p. 11).

In the case of the Department of Geography at the University of Michigan, an initial review of several troubled departments occurred within the criteria prescribed in that institution's guidelines for program discontinuance. Having identified one specific department, the college began official proceedings, in the form of full-blown internal and external program reviews and consultation with the college faculty.

The initiation of program discontinuance may well be the most crucial part in the entire sequence of events. It is at this point all subsequent actions are set. One problem in the Michigan case was when to consult with the department. Michigan's guidelines for program discontinuance mandate that a department be consulted before comprehensive review and the decision-making process begin. It was found, however, that this requirement could not be fulfilled to everyone's satisfaction. It seems reasonable to assume that no unit would be able to assist constructively and objectively in a process that may lead to its demise. Particularly difficult is Michigan's requirement for *early* consultation. On the one hand, once a target has been identified, the point of early consultation has passed. On the other hand, fairly complete data must be assembled before an initial decision to open proceedings can be made and announced. To this day, the questions of *when* early consultation is supposed to occur and *how* it can take place constructively and realistically remain unanswered.

To initiate program discontinuance, proper timing must be considered, realistic goals developed, a process established, and obstacles and incentives identified. In the consideration of timing, it is recommended that the actors evaluate the situation and take preparatory steps before initiating program reviews that may lead to discontinuance. Declining or stagnating finances, student enrollment, and program quality must be amply indicated. A "shotgun" approach must be avoided. The situation should

not be allowed to become so desperate that not enough time is left for discussing alternatives.

Timing also plays a role in the political arena. For instance, it is important to know whether or not central executive officers are willing and able to make conclusive decisions, if not, it may be advisable to pursue reduction through other means. Proper timing requires an analysis of key actors in the organization. It is important to know who is likely to be in favor of termination, who resists change, and who might act as a catalyst. If previous experience indicates that personnel are likely to resist program discontinuance, it may be necessary to cultivate a group of actors who favor change before broaching discontinuance again.

Realistic goals for program discontinuance, the second concern, can be general or specific. Some general goals might be to induce awareness that retrenchment is possible, to delineate the institution's priorities, or to enforce quality control. Specific goals might be expressed in terms of program or budget, to eliminate programs with fewer than three graduates per year or to reduce the institution's budget by 10 percent by eliminating all quantitatively and qualitatively marginal programs. Experience suggests that the absence of an overall plan and objectives for the institution and its units can be interpreted to mean that program discontinuance is a rather capricious undertaking or that the administration is unwilling share its plans with the faculty. Goals should be developed to lend reason and consistency to the subsequent establishment of procedures for review, criteria, evaluations, and time frames. For instance, a state university could decide that all Ph.D. programs in the humanities that had fewer than five graduates during each of the past three years should be evaluated by a joint committee of internal evaluators and external consultants. Criteria for the evaluation, in addition to productivity, might be the state's needs, the proximity of similar programs at other institutions, and quality of the faculty.

The third important concern is the process of discontinuance itself. Mims (1978) and Seely (1981) have identified various levels of intensity in reviews and alternatives to the process. They argue that organizations are seldom in a position to design new procedures. Rather, procedures are being shaped incrementally by existing policies—sometimes guidelines—by the infrastructure, and by tradition. In view of the fact that program discontinuance tends to create resentment and resistance, formal policy and de facto arrangements should be reassessed and possibly altered as a way of building consensus, then subsequently published.

A fourth concern is the identification of potential obstacles and incentives. Obstacles might include a highly political environment, differences in departments' power and prestige, or pressures from various special interest groups—students, faculty, alumni, legislators, or organizations. Precautionary strategies or contingency plans should be developed to evaluate or diffuse such interferences. For instance, one way to avoid alienation from the very beginning might be to invite broad participation in the process. Another strategy might be to provide programmatic or financial

incentives for discontinuing programs the agreement that new programs will be approved if deadwood is eliminated, the promise not to deduct saved funds or to include indicators of cost efficiency in otherwise enrollment-driven appropriation formulas, or the promise of less interference from above with greater voluntary program discontinuance

Program Review

In view of the fact that goals of program discontinuance, the mode of interaction, and timing have already been determined during initiation, program review can be looked upon as the first step toward implementing these decisions.

Models for evaluation. Literature on program review has mushroomed tremendously during the past decade, and Dressel's work (1976) on evaluation models, criteria, and procedures has long been regarded as spearheading the field. Dressel differentiates evaluations according to their objectives: (1) leading to the development of new programs, (2) leading to decisions about resources (input evaluation), (3) evaluating previous decisions (process evaluation), and (4) reviewing the achievement of goals (output evaluation). Output evaluation may be the most appropriate concept for program discontinuance (Berdahl 1975). It may lead to:

- identifying correspondencies and discrepancies between original objectives and actual attainments
- identifying unintended results and suggestions as to possible causes
- providing for information and suggestions for decisions to alter previous plans and processes
- providing for quality control
- providing for basic information and suggestions for continuing, modifying, or terminating programs (Dressel 1976, p. 16).

Typically, program reviews initiated by the state are conducted by outside consultants, while those initiated by an institution are conducted by in-house personnel, usually faculty. Although various schools still rely on consultants or an external team of reviewers, the majority of institutions have found that method too costly.

Criteria. At the core of the review process is the selection of criteria to be used in the evaluation. Selecting an appropriate model for the specific evaluation tends to be a lengthy, formative process of adapting or adopting existing models or designing new ones. Practitioners agree that criteria for evaluation need to strike a compromise between what ought to be assessed and what can reasonably be assessed. The following 10 criteria have been recommended:

1. the number of graduates from the program in each of the last five years

2. the number of students enrolled in the program, rates of entry and dropout
3. the size of classes and the cost of courses identified as integral elements in the program
4. cost per program graduate
5. faculty workload
6. program quality as reflected by its regional or national reputation, faculty qualifications, and the level of position achieved by graduates of the program
7. total number of program graduates in similar programs from all institutions in the state, region, or nation
8. the economies or improvements in quality to be achieved by consolidating or eliminating the program
9. general student interest and demand for the program,
10. the appropriateness of the program to the institution's mission (Southern Regional Education Board 1977, p. 4).

Despite the years of experience in selecting criteria and indicators to measure them, much contention continues to exist. For instance, in the case of the University of Michigan's review of the Department of Geography, the main cause of disagreement focused on the relative importance of *quality* vis-à-vis *centrality* of the discipline. The following chart illustrates how the interplay between these two criteria, particularly if neither is particularly weak nor strong, can cloud decision making:

Quality	Centrality	Decision
high	high	Continuance
high	low	?
low	high	?
low	low	Discontinuance

If quality is of prime importance, one could argue that superior quality might result in more centrality, low quality, even in a typically central discipline, might cause a move away from centrality. Conversely, if centrality is the main concern, low quality should be improved by weeding out weak faculty or by invigorating the unit with new blood and new resources. The financial side of this argument becomes secondary in that centrality in the intellectual marketplace would seem to imply a certain justification for securing enough resources. But intellectual difficulties rest not only in determining the relative priorities of these two criteria but also in defining and measuring the concept of centrality itself. Within the galaxy of offerings, how does one determine the degree of importance of any one discipline? Should it be placed by an ideal perception, and whose?

Or should it be placed on the basis of demand as demonstrated by some measurable criteria?*

Legitimacy of the review team and data. Another difficulty encountered in the evaluation of programs is the fact that the good intentions of faculty conducting internal reviews are difficult to realize. Willingness to serve on a particular review committee seems to put those faculty in an adversarial position vis-à-vis the faculty under review and the faculty who rally to the support of their beleaguered colleagues. Even the most thorough and objective members of a review team may find themselves labeled adversaries, if not henchmen. The same can be said about the data used. Comments that certain issues are unfair, irrelevant, incorrect, or biased seem to be part of the process.

Participation of faculty. Literature in organizational theory suggests that the implementation of retrenchment contributes to centralization and more authoritative methods of governance (Riley and Baldrige 1977; Cohen and March 1974). One reason for this development may be that faculty (and students), although steeped in the collegial mode of government, find it difficult to generate substantive objections, in part because overall information is lacking. Consequently, discussions tend to focus on procedural matters like the legitimacy of a particular criterion or of specific data rather than on the economic, curricular, and qualitative issues at hand. Realistic counterproposals are rarely voiced, a situation that may lead to the impression that tough decisions cannot be made through democratic processes including the total faculty and consequently must be handled through representation.

The department vis-à-vis the discipline. The formation of antitermination forces can assume powerful dimensions (Melchiori 1980). While resistance can occur in the form of outright verbal protests, a more subtle version is just as difficult to deal with—that is, the inference by people outside a particular university that a particular discontinuance means nothing short of passing judgment on the legitimacy of the discipline per se. The extent to which such a spillover effect occurs is directly related to an institution's national standing and prestige, an influence a university "normally" would not want to deny.

Decision Making

The trauma of the decision stage will depend upon care taken and fairness exercised in the two previous phases. Theoretically, the final decision most likely will be made by a board of regents of the institution or of the system. It seems to say, however, that the decision will likely be negative without

*For further insights on this issue, see Kotler and Murphy (1981), in which the authors describe an evaluation tool for academic portfolios whose primary dimensions of evaluation are centrality and quality.

the consent of the affected dean to discontinue one of his or her programs. Similarly, it seems unfeasible for college administrators to request discontinuance without having assured themselves a fair chance of success with their trustees before opening any proceedings.

The decision-making phase is likely to become a fairly complex issue in light of certain characteristics of postsecondary institutions. In a decentralized organization with a strong tradition of faculty governance, it can be anticipated that the degree of mistrust in the process, the criteria, and the data used is directly related to whether the actors involved are perceived to be faculty or administrators. Another problem, especially in large institutions, may arise if it can be argued that a specific department is not the weakest and that many others less qualified in the university will be left untouched. Clearly, in a highly decentralized system neither intellectual measures nor organizational mechanisms exist to conduct supracollegiate comparisons of *raison d'être* and quality. Autonomy in this case shows its less desirable attributes.

It is important to recognize that the amount of participation by faculty and students in a process as comprehensive as the elimination of a program or department is definitely limited. Clearly, the pros and cons of discontinuing a unit or the quality of individuals cannot be discussed, much less resolved, by the collective faculty. The same can be said about students' participation. The size of the institution and the complexity of its various budgets and existing commitments limit their insight and thus the utility of their input. Another factor is the rapidity with which these decisions sometimes need to be made to respond to unexpected shortfalls. Although ample provisions for participation ought to be built into the process, it is necessary to draw a line between *advisory capacities* on the part of faculty and students and *decision-making powers* on the part of their representatives.

Yet another potential dilemma is the accusation that small units are more likely to be discontinued than larger units. Cases over the past decade have indicated that the larger the unit and the more national resistance the discipline can generate, the more difficult it is to pursue reductions (Melchiori 1980). The sheer force of disciplines like nursing, English, or history seems to protect weak subfields within them. (The point can be made though that large units might be able to bring about internal "terminations" without public attention.) In the evaluation of options, equitable and efficient solutions need to be sought.

A review team might try to accommodate this problem by proposing two solutions: discontinuance of the entire department or discontinuance of a program or programs within a department. While at first glance the former seems to be more drastic, the latter is in fact potentially much more radical in that it allows for the elimination of weak fields in otherwise strong and central departments as well as for the retention of strong parts in otherwise weak departments. Its major handicap, however, is that unless it is initiated by the department itself, it might be viewed as a witch hunt aimed at selected individuals. Because of such potential for misuse,

discontinuance of programs within a department remains an almost untested alternative.

Yet another concern is the importance of being specific about decisions. Shortcomings and suggested courses of action must be explained. If the program is to be modified, specific recommendations and possible sources of funding must be pointed out. If the program is to be merged, conditions and initiators should be pointed out. A constructive climate must be maintained if the program is to be kept until it has been further reviewed or until certain aspects have improved. Terms like "probation" might not be appropriate to use in this case. In all of these cases, it is imperative to be specific about time frames within which changes are to be made.

Different conditions exist if the institution is more interested in having individual colleges identify their excellent, essential, and marginal programs for the purpose of gradually shifting allocations. In those cases, decisions might specify to what extent funds are to be shifted from one category to another and within what time frame. Individual schools must have as much flexibility as possible. Program discontinuance is less traumatic when programs are allowed to die inconspicuously.

Developing incentives for discontinuance and mechanisms for coping with it can aid in the acceptance of a decision to terminate. Funds for program development could be provided to encourage change and to accommodate transitional phases. Faculty retraining centers, possibly subsidized by state agencies, might be established to teach new marketable skills. Another incentive might be to point out the political clout to be gained by closing marginal programs. Such gains might be manifested later in program approval or budget allocations.

Finally, the right to appeal a decision to terminate a program might become an important factor. Very little has been written about formal provisions for appeal. One reason could be that administrators feel the process itself provides ample opportunity to speak up, provide data and counterdata, and literally argue at every step of the way. Still, some evidence indicates that objections were voiced but nobody seemed to be designated to review and respond. Dougherty's research describes a case where faculty and students felt a program was earmarked for discontinuance because some of the faculty had Marxist leanings. In another case, although the review would justify closure, the faculty felt the decision was premature because the program was still being developed, almost inevitably indicating that faculty members' research and publications were not yet up to standards (1979; 1981a; 1981b). These cases indicate how important it is to clearly enumerate expected program goals. All newly approved programs should contain provisions for long-range expectations, future reviews, and criteria for closure.

Implementation and the Assessment of Impact

Very little information is available on how specific program closures were implemented and what the results have been. This lack of feedback is apparent on both the state and the institutional levels (Melchiori 1980).

Regarding closures initiated by state agencies, it was found that communication between the agencies and the institutions tends to decrease as the events proceed. Decisions to discontinue programs are made and left to the institutions to deal with. Agencies apparently solicit information on the approximate number of programs discontinued but are not informed about how the closures were accomplished. Agencies have even less information on terminations initiated by institutions. For closures initiated by institutions, the lack of complete information is not so much the absence of any data as it is reluctance on the part of those who have been intimately involved in the process to be approached about the issue, its outcomes, and their reflections. Particularly in highly publicized cases, the actors feel that it is time to move on and return to a "normal" state. While such an attitude may be understandable, it is unfortunate nonetheless that no comprehensive analyses are available.

It is safe to say that, nationwide, only a limited number of academic departments have been eliminated. Closures of entire schools have been considered in several cases (e.g., Michigan State University), but most cases were resolved through compromises. Most discontinuations were the result of mergers, major revisions, or elimination of "paper" programs or certain degrees, typically reorganizations driven by natural attrition rather than by actually laying off employees. The following assessment of impacts is extrapolated from recent case studies, surveys, and articles (see, for example, Dougherty 1979, 1981a, 1981b; Mingle 1978, Melchiori 1980, 1981, 1982).

Impact on students. In general, impact on students can be assumed to be minimal, as programs with large enrollment are rarely terminated. Provisions are often made for protecting students by allowing them reasonable opportunity to complete the program. However, whether "reasonable opportunity" is two years or four years for undergraduates seems to be one of the problems.

One complaint frequently voiced by students is that decisions to change curricula are made without their participation. Michigan State University's attempting to close entire schools once again brought to light long-standing resentment by students, who felt that they have no voice in shaping the curriculum and influencing decisions about budgets.

Impact on faculty. Newspapers and professional journals increasingly report on institutions' intending to lay off or release large numbers of faculty. (California in fact is currently finalizing a plan to lay off faculty). So far, however, relatively few tenured faculty have been released as a direct result of program discontinuance. This is not to say that major changes have not occurred. They have, but hard data are difficult to obtain. One reason is that faculty begin to look for new positions before the review of their program is completed. The tendency for many moves and shifts to occur before the actual moment of program closure may relieve administrations of many problems. Substantially more lawsuits have been

filed by faculty or in their behalf than by students. Many of them are currently in various stages of investigation. Typically, the interpretation of tenure (job security or protection for academic freedom?), the definition of financial exigencies, involvement by a union, and questions of entitlement are at issue, the decisions in these cases are expected to leave their marks on higher education.

Impact on academic programs. It is not surprising that very little information is available on the impact of program discontinuance on remaining programs and on the entire selection of program offerings. One difficulty goes back to the problem of defining discontinuance. Another difficulty is that the extent of reallocation—closing some programs so as to support others better—would need to be taken into account. Information seems to indicate that in many cases funds saved by closing programs had to be used to pay utility bills or to make up shortfalls in appropriations rather than for actual program improvement.

A third difficulty in assessing the impact of program discontinuance on the remaining programs is that to assess the scope it would be necessary to look at the extent to which new programs have been established during the same time. Trading new programs for the elimination of outdated programs is a fairly common, albeit informal, practice between institutions and their agencies. In addition, umbrella, or interdisciplinary programs may have been created to accommodate curricula that were formerly satisfied by individual programs or departments.

Impact on institutional budgets and organizational behavior. Saving money by discontinuing programs puts institutions in a double bind. On the one hand, they have to prove to their internal constituencies that the savings are worth the upheaval—a difficult task, because, for the most part, the only immediately visible savings are nonacademic costs. Savings from faculty salaries occur only from terminating nontenured positions, while savings from tenured positions (assuming faculty are relocated rather than laid off) emerge gradually, upon retirement or as faculty eventually secure other positions. On the other hand, institutions do not want to advertise their savings lest the state reduce their next budget. This fear is unfounded so long as enrollment-driven formulas are used to assess state allocations. Program discontinuance has little effect on enrollment, as enrolled students are allowed to finish and new students are expected to be accommodated in related programs. Typically, budget savings are reallocated internally—to the departments, colleges, etc. That this practice indeed occurs is supported by the fact that new programs are often approved without allocating new dollars. One can conclude that program discontinuance seems to contribute positively to the general goal of adjusting to changing curricular demands within existing, even declining, budgets.*

*For information on the impact of program discontinuance on the relationship between universities and state agencies see Melchiori 1980, pp. 154–63.

Program discontinuance needs to be evaluated after it has been implemented. Although holistic and summative assessments may be unrealistic in the current climate, it seems that small-scale, incremental studies could be conducted. Researchers and administrators should:

- analyze the changes in enrollment in programs similar to the one discontinued at other nearby institutions
- assess the impact of program discontinuance on a given state's need for human resources compared to the number of graduates
- compare budgets before and after discontinuance, particularly specific categories like overhead, research, and other support costs
- analyze turnover patterns for faculty in a given unit
- monitor the effect of program discontinuance on existing research, rate of publication, etc., specifically by faculty in related disciplines
- review data on closures in light of information on approved new programs, particularly in terms of budget and staffing.

It may be more realistic to begin assessing impact incrementally. Small pockets of information may then lend themselves to the evaluation of broader, less tangible issues, such as the impact of program discontinuance on organizational "behavior" and stress, the level of trust and goodwill, and the quality and appropriateness of remaining programs. It may then be possible to reach a more conclusive verdict on the utility of program discontinuance as a vehicle for change in general and a tool for reduction in particular.

Planning for Program Discontinuance

What constitutes a *constructive* climate for reduction? A constructive environment is prepared to deal with the psychology of decline, handle questions of policy, minimize ad hoc decisions about curricula, provide alternatives, minimize stress, and develop appropriate coping mechanisms and structures for incentives and rewards. Provisions intended to make program discontinuance the result of careful long-range planning rather than the response to immediate pressures can be categorized in three ways: those that affect organization, those that are concerned with planning, and those concerned with the structure of incentives and rewards.

Organizational Provisions

These recommendations would provide an institution (either directly or through its state agency) with the policies, data, and personnel to design strategies for program discontinuance.

Development of guidelines for program discontinuance. So far, very few institutions have formal guidelines for program discontinuance; instead, they lean upon their existing policies for due process and common law practices for evaluations of programs and personnel. These policies and practices, however, may be insufficient to cope with the problems and dilemmas associated with program discontinuance. Two possibilities are worthy of consideration, one focusing on personnel, the other on procedure and curricula.

The University of Wisconsin System in 1975 developed a set of provisions for reductions that focus on personnel. Once a formal declaration of financial exigency has been issued, these provisions allow for laying off faculty and eliminating program functions. They provide criteria, procedures for review, and support measures, which may include 12 months' notice of layoffs, paid leaves of absence, and others (Pondrum 1980, p. 55). Using the other approach, the University of Michigan's guidelines for program discontinuance provide for input from faculty and students in the evaluation process, prescribe a sequence of decision points, require that students be allowed to finish in their declared major, and demand fair efforts to relocate affected faculty.

Clearly, these two processes differ substantially in their approach, but the result of both is similar: the development of a set of specific guidelines that provide needed backbone in a given situation. Retrenchment calls for "guidelines that allay fears and solve problems, attributes . . . difficult to obtain in the typical higher education environment of organizational ambiguity [that] does not lend itself to precise conviction" (Davies and Morgan 1981, p. 39). Building on a conceptual four-phase model of policy formation by Enderud (1977), Davies and Morgan postulate that policies for nonroutine, highly visible, and potentially conflict-laden situations be based upon an institution's traditional pattern of decision making. As most universities operate on a combination of four organizational models—the bureaucratic (Weber 1947), the collegial (Millet 1962), the political (Bald-

ridge 1971a, 1971b), and the organized anarchy (Cohen and March 1974)—the formation of policy must allow for these components and weigh them according to tradition and perceptions of the power structure. Thus, the process of formulating policy may consist of an ambiguous period (phase 1), a political period (phase 2), a collegial period (phase 3), and a bureaucratic/executive period (phase 4). Davies and Morgan point out that missing a phase, or not allowing ample time, or mismatching actors in the process (politicians and bureaucrats, for instance) may lead to abortion of the process and require starting over.

The advantage of developing guidelines for discontinuance along this evolutionary model is that it facilitates attention to both the task at hand and the process. Clearly, the complexities and stages involved and the time required make it imperative that these guidelines be prepared before any discontinuance is actually initiated. Based on the experience at the University of Michigan, where formulating policy required two years, the need to *plan* for discontinuance cannot be emphasized enough.

The utility of any guidelines must not be overestimated, however. While they may play a useful role, serving as a point of reference or as a scapegoat at various times, it must be noted that the guidelines may actually be counterproductive in the effort to guarantee orderly input from faculty and students. Experience with Michigan's guidelines has shown that, because the regents ultimately will resolve any process operating under these guidelines, the locus of decision making is quite removed from the place of impact and thus may in fact work counter to faculty members' participation. Similarly, operating under these guidelines will inevitably mean performing in the public eye. There is less room for bargaining, making concessions, or planning for inconspicuous phasing out behind closed doors.

The role of institutional research offices during reduction. College administrators will require greater sophistication in planning and in the development of data if they are to provide meaningful leadership in the decade ahead. Richard Ricardson argues that good institutional research is a prerequisite for good management (1978, p. 69). As they vary so greatly in their responsibilities, mission, and influence in the organization, it is difficult to propose specific roles for institutional research offices in the process of changing curricula, but perhaps they could:

- assist in conceptualizing a process for program review in line with the institution's degree of (de)centralization
- identify appropriate data and estimate the cost and time involved in retrieving and interpreting them
- function as a clearinghouse of information on models of program review, case studies of program discontinuance, literature about organizational decline, AAUP guidelines on financial exigency, and internal precedents for program reduction
- analyze existing and potential modes of operation between the institution, other universities, and the state agency with respect to de-

veloping interinstitutional arrangements for curricula, staffing review committees, sharing information about the job market, and providing data for a comparative information base

- share experience in the use of computer databases with college- and department-level people who are involved in the review process.

The participation of the institutional research office can be invaluable when termination of a specific program is considered. Experience has shown that the validity of the data gathered and compared is related directly to the provider and whether that unit or person is seen as an adversary or protagonist, as "administration" or "faculty." Rather than having the administration gather initial information, the affected department "counter" information, and the review committee yet another set of data, those involved should consider delegating the entire function to the institutional research office. Doing so would require that everyone have a fairly good idea and agree in principle about what criteria should be taken into account and how much comparative data are needed and useful. Having the data collected by a neutral third party could prevent criticism about lack of objectivity, further, this method would allow some consistency in the release of material to the public and the press

Dissemination of information. The process of providing information about plans and decisions tends to take longer than expected, perhaps partly because faculty feel the administration has been talking about reduction for a long time. Regardless, it is important to make sure that information is available at all times through a variety of sources (the media and at faculty meetings, for example). It could include basic information about changes in managerial styles, in levels of expectation and performance, in criteria for promotion, in the distribution of salary increases, as well as how to obtain funding for research or learn new marketable skills.

Program discontinuance as a singular objective. Administrators should take care not to open too many Pandora's boxes during the program discontinuance process. Experience has shown that one particular activity or intent, perhaps the least popular one, will cause many skeletons or unresolved issues to emerge—for example, the extent of students' participation, the relative power of small versus large departments, the extent of faculty governance in times of retrenchment, the untested status of tenure, or the lingering ambiguity regarding the makeup of the curriculum and the priorities and values of higher education in general. One is reminded of Cohen and March's "garbage can" process, a model reflecting the fact that organizational phenomena normally regarded as isolated and pathological begin to emerge if conditions for more normal and rational models are no longer present (1974, p. 91). The difficulty is that it may not be possible in most instances to wait until these issues have found a new nexus around which to revolve and then quietly move ahead and decide upon the actual issue at hand.

Provisions for Planning

Continuous reviews and long-range planning. Institutions should undertake continuous program reviews. This recommendation goes far beyond the typical cycle of program review now being pursued by most colleges and universities. It suggests that departments review their priorities at every decision point, requesting faculty positions in accordance with curricular needs rather than replacing a specific position, outlining plans to reduce numbers of personnel along the lines of expected natural attrition, reviewing the possibility of sharing faculty across disciplines in innovative arrangements, and considering collapsing administrative umbrella structures for previously separate centers and institutes. It is important in all of these activities to focus on functions or curricular entities rather than on individuals, which would force individuals into defensive reactions and uncooperative behavior.

Establishment of review teams. The review of programs is a process requiring tact, objectivity, knowledge of the database, and basic institutional guidelines. All these requirements involve training and experience in guiding active review teams. Learning these skills should occur in normal times, not in times of stress. In many instances, review teams have been found to function as a neutral buffer between a state agency requesting certain reviews and its constituencies, or between a dean and an affected department. To be accepted by all parties, the quality and stature of the team members is all the more important.

Development of sunset provisions. The notorious lack of agreement on program objectives and criteria for review in general has long been a major cause in preventing the serious consideration of closing an entire program or department. Several years ago, Colorado introduced a new idea into the state governmental process—sunset legislation. This provision means that a new policy, program, or agency is implemented with the stipulation that it be discontinued whenever its *raison d'être* is fulfilled or not being accomplished within a given time. A total of 27 postsecondary state agencies are using sunset provisions in issues of program development:

- Six state agencies now *mandate* sunset provisions whenever a new program is approved. This means that the newly approved program be reviewed within one, two, or five years. Some of these states grant only conditional approval until a first program review has taken place. (In four of these six states the state government had officially enacted sunset legislation.)
- One state agency includes sunset provisions only in cases of pilot programs. (This state's government had also officially enacted sunset legislation.)
- Twenty state agencies now *recommend* that new programs be reviewed within a certain time frame. (In nine of these 20 states the government had officially enacted sunset legislation.)

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- Sixteen states were found not to use any sunset provisions. Typically, those state agencies for higher education have no program approval authority to begin with (Melchiori 1980, p. 57).

Although no attempt was made at the time of the research to assess the actual utility and success of such sunset provisions, both state and institutional bodies whose function it is to approve programs should consider the inclusion of sunset provisions in the actual evaluation of the proposed activities, issues of criteria and timing need to be developed with the full knowledge of those planning to work in these activities

Provisions for Incentives and Rewards

Although not much empirical information is available on the impact of incentives, their use per se has long been recognized as a tool to influence the behavior of people with respect to desired performance. Fenker (1977) suggests that the identification and ranking of incentives for an institutional environment will result in the creation of institutional standards. (He identified 17 incentives.) Indeed, the neglect of incentives at various stages in the discontinuance process has a compounding negative impact on final implementations. Conversely, the strategic employment of coping mechanisms may have a constructive effect on actual terminations, producing less negative publicity and fewer formal complaints or lawsuits (Melchiori 1981). With the recognition that most obstacles to discontinuance are not specifically related to reduction but to dilemmas and issues in higher education, it would be unrealistic to assume that these obstacles could now be dealt with formally and directly for the purpose of implementing curricular changes. A variety of measures—some very subtle, others quite open—have come into being to circumvent some of these problems. The suggested incentives and mechanisms for coping display either *constructive/positive* or *punitive/negative* attributes. The focus here is on those that are perceived to have a positive impact on the process. To varying degrees, these suggestions may apply to all strata of higher education organizations, to state agencies dealing with their universities, to universities dealing with their respective colleges, and to colleges dealing with their departments or programs.

Cultivation of a reduction ideology by:

- announcing a new "era" that is advertised with a slogan like "renewal through reduction" or "smaller and better"
- appointing people oriented to change to key positions to break up forces that resist change within the organization

Inducement of retrenchment by providing incentives or rewards for reduction by:

- stimulating programmatic change through tradeoffs (e.g., approving new programs or positions without allocating additional funds)
- developing budgetary incentives (e.g., amending existing enrollment-driven budget formulas to include specific incentives for performance)

- signaling satisfaction with administrators who pull for the institution by granting merit increases
- emphasizing political advantages (e.g., goodwill for the institution with the state agency, the legislature, the appropriations committee, goodwill for the department with the college, etc.)

Clarification or modification of existing authority and procedures by:

- reviewing and possibly amending formal and informal policies regarding curricular change
 - developing guidelines for program discontinuance
 - establishing additional procedures for appeal
 - identifying appropriate criteria for review and their indicators
 - soliciting input regarding program typologies, criteria, and data needs for the purpose of establishing mutually agreed upon procedures for discontinuance and goals; ensuring objectivity of the decision process
- Simulation of the implications of expected declining budgets and/or enrollments by:*

- assisting in the development of hiring ceilings
- assisting in the development of faculty reduction plans
- determining appropriate ratios in tenured and nontenured personnel policies to reach desired goals

Enhancement of the change process by:

- avoiding major confrontations that may result in a polarization of pro- and anti-change forces
- preventing dramatic showdowns in court
- avoiding the alienation of important power blocs, such as alumni, specific disciplines, or political parties
- providing buffer zones between institutions and agencies in the form of committees or academic councils for colleges and departments

Provision of seed monies for:

- transforming declining programs into attractive new interdisciplinary programs, creating generic or thematic mergers, or forming consortia and other arrangements
- stimulating research by establishing a liaison between university and industry or—as is currently done by many institutions—by creating formal research corporations

In addition to these suggestions, other incentives deal specifically with individual situations, particularly with faculty in "threatened" departments.

- Institutions need to recognize the plight of faculty affected by program closure, merger, or consolidation by encouraging, or even subsidizing, the establishment of retraining centers and providing information on the job market.
- Department chairpersons should not assume that reducing faculty necessarily means that those funds are lost to their units; some may in fact be traded to fill areas of growing demand.

- Incentives for retirement need to be developed that would allow a person to retire before the age of 70 without the loss of regular salary or full retirement benefits. As many as 10 different models for such incentives have been identified (Patton 1978).
- The mortgaging of future retirements (that is, the premature filling of positions that are expected to become vacant as the result of retirement at a specific date) is a very realistic and widely encouraged method of planning for retirement. However, those in charge of hiring should refrain from using it too extensively and prematurely because it may narrow their options and decrease their freedom.
- Chairpersons should look upon the annual salary program as a meritorious reward system; by stretching the "institutional average" from zero to whatever seems appropriate or possible at the other end of the scale, some faculty may get the hint.
- Colleges should supplement prestigious fellowship stipends with additional funds to stimulate research. Faculty sometimes decline the acceptance of such awards because they typically are below regular salary levels. Supplements should be designed so as to enhance their attractiveness, increase possibilities for research, and contribute to raising faculty morale.

A Model for Coping Mechanisms

Although many agencies and institutions have employed some of these incentives and rewards, no evidence exists that they are being used systematically—that is, in a planned, time-ordered sequence that would be most appropriate to the process of academic change. This proposed model for coping with retrenchment in an orderly fashion includes three phases that would be in harmony with the kind of program review process used in a particular state or institution. (1) developing incentives to induce reduction, (2) providing general devices for coping; and (3) establishing rewards for the effective implementation of retrenchment. The suggested mechanisms should be considered for implementation before the formal opening of proceedings to discontinue a program.

Phase 1—Development of incentives. Incentives can be used to encourage institutions to become more oriented toward change and reduction. The entire incentive structure in a given state, institution, or college may have to be reevaluated and possibly reoriented to reflect the change of climate from that of growth to that of decline, by amending budget formulas with efficiency incentives or by providing seed money to initiate changes. It could be done by denying the approval of new programs unless deadwood is eliminated. Institutions may find it helpful to provide academic departments with information on possible options for reducing programs, such as the elimination of subspecialties or certain degree levels, or mergers of similar specialties. Institutions might find a political incentive in the goodwill they could generate with state legislators and the governor by their display of fiscal finesse.

Phase 2—Development of general devices for coping. Coping devices can be used to help overcome or circumvent the obstacles and dilemmas encountered during change. The assumption is that, for the most part, one cannot realistically expect to eliminate the identified hindrances per se but to overcome them informally and indirectly. An agency or institution might use the following suggestions:

- cultivate a reduction ideology
- review legal authorities and procedures for program review, and assess possibilities for appeal
- develop specific guidelines for program discontinuance and include sunset provisions in approvals of new programs
- simulate changes in budgets and enrollments and suggest needed changes in policies that would accommodate expected declines and reductions
- encourage the establishment of comparable databases between institutions and the agency
- avoid the formation of antichange coalitions and dramatic show-downs in court that might result in bad press for all
- provide buffers between the agency and institution officials
- encourage and subsidize the establishment of centers to retrain faculty and possibly provide regional job information to faculty
- provide seed money for curricular changes (e.g., mergers or consolidations) and for developing additional research activities.

Phase 3—Development of rewards. The purpose of developing rewards for having implemented changes in curricula is to maintain the momentum for reduction beyond a particular review cycle. The main vehicle seems to be politicoeconomic in nature. Institutions need to feel that their programs, faculty, and students have something to gain from eliminating underproductive programs, which might manifest itself in a state agency's providing extra support for the creation of interdisciplinary and interinstitutional programs. Rewards might take the form of first access to established priority funds, supplementary state appropriations, or other assets for departments or colleges willing to reduce programs. Rewards might become visible in the institution's subsequent political dealings with the state government (or the department's interaction with the college administration).

Summary

An orderly way may be found to consider, plan, and implement curricular change in general and program reduction in particular and by doing so reduce some of the unpleasant surprises and barriers experienced previously. While some of the activities proposed here are already pursued systematically, it seems that state and institution officials would benefit from sharing their strategies more regularly, thus encouraging these recommendations to be implemented in a selective, timely, and systematic

fashion. The cultivation of a climate conducive to retrenchment, the development of guidelines for discontinuance and proper procedures for review and appeal, and the analysis of obstacles and incentives seem to enhance the probability of gradual success in reducing programs. Apparently, a cultivated climate produces less publicity and fewer grievances yet sound and realistic curricula.

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